

Superplasticising Retarding Type Admixture

DESCRIPTION

TamCem 60NH is a poly-carboxylic ether based high range water reducing admixture conforming to ASTM C494 Type G and IS 9103 super plasticizer retarding type. It has been developed for self-compacting concrete, high workable concrete, ready mixed concrete etc. It is compatible with all cements to achieve the desired performance.

TamCem 60NH consist of selective polycarboxylate ether based long chain polymers branched with ethoxylates and selective neutralize hydroxycarboxylic acid to achieve high water reduction and longer open time to facilitate extended time for concrete placement without significant delayed setting of the concrete.

Traditional SNF based admixture are absorbed by cement (moistened) granules. They wrap around the cement (moisten) granules and developed negative charges. This electrostatic force causes the cement paste to disperse, causing the cement particles de-flocculate resulting in less water demand compared to concrete without admixture.

TamCem 60NH has a different chemical structure compared to traditional SNF based materials. Initially after mixing with cement (moisten), TamCem 60NH also develops negative charges around the cement paste, but the side chains linked to the backbone generates a steric hindrance providing a physical barrier, along with the electrostatic barrier, between the cement grains. Dual repulsive force provides more dispersibility to the cement paste, resulting in a higher water reduction.

KEY BENEFITS

- › Low water-cement ratio enhances high early and ultimate strength of concrete
- › High flowability provides easy placement and compaction
- › High range water reduction
- › Better resistance to carbonation and other atmospheric conditions
- › Dispersibility of cement particles reduces permeability of concrete and also discontinues spore in concrete resulting in low water penetration
- › Performs like viscosity modifier for excellent flow and pumpability

TYPICAL APPLICATIONS

- › High-workable concrete
- › High performance concrete
- › Durable concrete
- › Ready mixed concrete

TECHNICAL DATA

TamCem 60NH	
Colour	Light Brown Liquid
Density, g/cm ³	1.09 ± 0.02
pH	Min. 6
Chloride Content	Max. 0.2%
All above test completed at 25°C	

All technical data stated here is based on tests carried out under laboratory conditions.

APPLICATION GUIDELINES

Dosage can reach up to 1.4% by weight of cementitious binder. Should application conditions require a higher dosage rate such as with self-compacting concrete (SCC) applications, consult with your local Normet representative.

Trial concrete mixes must be carried out to determine the appropriate dosage.

An independent dispenser and feed line must be used during the application. TamCem 60NH can be added to the mixed concrete or into the mixing water but addition to any dry concrete mix is not recommended.

PACKAGING

TamCem 60NH is available in 225 kg barrels. Packaging size may vary subject to local regulations and requirements. Please contact your local Normet representative for more details.

STORAGE

TamCem 60NH should be stored at room temperature (min 10°C and max 40°C). It should be kept dry and away from sunlight, in shaded area. If package is remained unopened and stored as specified, then shelf life of 1 year can be expected.

HEALTH & SAFETY

TamCem 60NH should only be used as directed. We always recommend that the Safety Data Sheet (SDS) is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The SDS is available upon request from your local Normet representative.